

NO. 46A

December 9, 1983

THE ROLE OF INTERNATIONAL TRADE IN THE JAPANESE ECONOMY

Summary

Japan is once again experiencing a rapid rise in its merchandise trade and current-account surpluses following record deficits in the wake of the 1979 oil shock. In the past, these large increases have become the focus of foreign criticism, and their reemergence is generating attention on the role of international trade in the Japanese economy.

This report demonstrates that while trade is vitally important, Japan's trade dependence is not as great as many Americans think; the level of the economy's exposure to trade is much closer to the U.S. than to the European model. The Japanese, do, however, seem to be more aware of the importance of trade than the Americans, partly because of their high degree of dependence on imported raw materials.

At the policy level, virtually all of the measures instituted in the 1950s to promote exports have now been dismantled for more than a decade. Import barriers have fallen and Tokyo has taken a variety of measures to stimulate imports. Although some barriers certainly remain, Japan is one of the few countries that continues to move unilaterally toward more open trade. Still, however, the macroeconomic factors generating surpluses are likely to continue for some time -- barring a recurrence of oil disruptions -- and eliminating the trade surplus is an unrealistic goal at the present time. This conclusion, while economically rational, will remain politically unpalatable in the United States.

The Size and Growth of Trade in Japan

One of the common errors Americans make in discussing Japan is the assumption that merchandise trade is a large share of the country's GNP. This conclusion no doubt stems from the strong competitiveness of Japanese exports and the observation that Japan is highly dependent upon imported raw materials. Yet it is quite simply not true; the measure of Japan's dependence on trade is generally closer to the United States' level than is realized.

Table 1 presents data for the period since 1970 on the ratio of Japan's exports (f.o.b.) and imports (c.i.f.) to GNP. From levels of around 10 percent, exports have increased to 13 percent over this period, while imports have increased from around 9 percent to a bit over 12 percent. The increases were primarily the result of rising oil prices (and an increase in exports to pay the import bill). A closer look shows that after the 1973 and 1979 oil shocks, the export and import ratios tended to stabilize at the new, somewhat higher levels.

Two features stand out from the data. First, there is no indication that exports have consistently grown as a share of GNP. Except for the two increases due to the effects of the oil shocks, exports tend to be a stable share of GNP. Second, the levels of exports and imports relative to GNP are not at all high in terms of an international comparison.

Table 2 provides similar data on exports and imports for the United States. However, because exports are measured on an f.a.s. basis, the values are inflated slightly over f.o.b. From only 4.0 percent in 1965, the ratio of exports to GNP has risen to about 8 percent, while the ratio for imports has risen from 3.1 percent to around 9 percent. While these figures are lower than those in Japan, the disparity between the two countries seems to have narrowed somewhat. In addition, the rise in both the export and import ratios in the United States has been far greater than in Japan; the ratio of exports to GNP, for example, increased 2.0 times between 1965 and 1982 in the United States while it increased only 1.4 times in Japan.

In contrast, most other industrial countries are significantly more exposed to trade. Table 3 shows the 1982 export (f.o.b.) and import (c.i.f.) ratios to GNP for France, Germany, Britain, Italy, Canada and Australia. The European countries and Canada generally record export and import ratios above 20 percent. Australia, which is as isolated as Japan from its major export markets, has lower ratios, but even it exceeds the levels of Japan on both exports, which are 14.2 percent of GNP, and imports, which are 17.2 percent of GNP.

The differences seem to be the product of a number of factors, of which economic size and geography are the most important. Because trade is often a more important sector for small economies than large ones, Japan and the United States -- the two largest market economies in the world -- have lower ratios. Japan and the United States are also farther from most of their foreign markets than are the European countries, whose common land borders entail distances that are often less than those involved in domestic trade in the United States. If intra-European trade is eliminated from the figures for the

European countries, then the ratios look much more like those of Japan or the United States.

One of the implications of the relatively modest share of exports in the Japanese economy is that not very many Japanese exist primarily on the export market. A recent survey of the 928 firms that make up the first section of the Tokyo stock exchange reveals that the average ratio of exports to total sales for this set of companies is 18 percent, and only 39 of them have a ratio of exports to total sales that exceeds 50 percent. Among these are some of the names well-known to foreigners, including Minolta (82 percent), Sony (71 percent), Casio (66 percent) and Sharp (55 percent). Many other large companies in Japan have very low export ratios. Hitachi, the second-largest electrical equipment corporation in Japan has a 30-percent ratio; Toshiba, 24 percent; Nippondenso (the largest manufacturer of automobile electrical equipment) 10 percent; Riccar (the third-largest manufacturer of sewing machines in Japan) 8 percent; and Asahi Diamond (the largest manufacturer of diamond-tipped tools) 7 percent.

In fact, Japanese international competitiveness appears to be concentrated in the leading companies of a few industries, including automobiles, consumer electronics and steel. For those firms that are heavily involved in exports, a high priority is given to market research and adaption of products to meet foreign standards and tastes. This is a trait that many Japanese observers feel is lacking in American companies. It is true that as modest as Japanese export performance seems, Japanese firms are more export-oriented than American firms. For example, the ratio of manufactured exports to total manufactured shipments in the United States was 7.7 percent in 1981.

The proportion of manufactured goods to total imports is lower in Japan than in other industrial countries, another fact that has caused difficulty for Japan. Economists point out, however, that this lower proportion is a result of Japan's heavy reliance on imported raw materials. This dependence has been explored earlier in JEI Report No. 25A, July 2, 1982, which concluded that even though all industrial nations depend upon imported raw materials to a considerable degree, Japan does stand out in both its degree of dependence and on the wide variety of materials which it must import.

As it has no raw materials to export, Japan must develop a comparative advantage in manufactured goods if it is to pay its bills, so that it is no surprise that Japan runs a very lopsided surplus in manufactured goods trade. The economic forces that assure this result carry another implication -- that if Japan is to absorb more manufactured imports from the United States, we must be prepared to buy more Japanese exports as well.

This analysis of Japan's position in the international economy is supported by the conclusions of a diverse group of economists, including the General Accounting Office, the Japan-U.S. Economic Relations Group, the Council of Economic Advisers and University of Michigan economist Gary Saxonhouse (see sources at the end of this report).

This should not be taken to mean that Japan has no import barriers. All nations restrict trade to some extent and Japan is no exception. Removal of those barriers remains a legitimate goal of the international trading system. However, we should be fully aware of the implications of this process. The country's relatively modest exposure to international trade, its large share of raw material imports, and its comparative advantage in manufactured goods trade will not change with the removal of import barriers.

Government Policy Toward Trade

Americans assume that the present trade imbalance with Japan is the product of Japanese import barriers because in the 1950s and 1960s, import restrictions in Japan did deter the entry of goods. In addition, that early postwar period was characterized by government policies to promote exports. The desirability of both protectionist and export promotion policies at that time was, however, conceded by Japan's trading partners.

During the early postwar period, the yen was overvalued at the level established under the Bretton Woods system (\$360=\$1), resulting in recurring balance-of-payments problems. Under the Bretton Woods agreement, countries with current-account deficits and resulting selling pressure on their currencies were committed to selling their official holdings of foreign exchange in the market to maintain the established exchange rate. Since those reserves were not infinite, countries with continuing deficits eventually had no choice but to officially devalue their currencies. Because the government of Japan was strongly committed to avoiding the international humiliation of a devaluation, the Japanese authorities pursued other options to control current-account deficits and stop the drain on official holdings of foreign currency.

These options included periodic use of monetary policy to slow the economy (in order to reduce imports and thus bring the current account into better balance), a network of extensive import barriers, and systematic use of official export-promotion policies. As Japan overcame its balance-of-payments problems in the mid 1960s, it began dismantling both programs -- a process covered in a special 1982 JEI publication (Japan's Import Barriers: An Analysis of Divergent Bilateral Views). To summarize the process briefly, from the time when liberalization began in the early 1960s, Japan has continued to remove quotas, lower tariffs, and lift other impediments to trade. Japan now has the lowest average tariff level among industrial countries, retains only a few residual quotas (the number of which compares favorably with other industrial countries), and remains one of the few developed nations that continues to liberalize unilaterally. While some barriers remain and have become irritants in bilateral relations, there is virtually no comparison between Japan today and a decade or two ago. Foreign criticism and pressure was an important element in this progress, but it is significant that the Japanese government was willing to oppose the domestic forces that favored continued restrictions and move consistently toward greater liberalization.

The experience with export promotion is essentially similar. In 1964, a representative year in the heyday of export promotion, the Japanese tax code provided several different benefits to exporters. First, a tax-free reserve

was allowed for overseas market development costs which allowed a postponement of taxes. Second, a similar provision was aimed specifically at medium/small firms. Third, a tax-free reserve was allowed for overseas investment losses. And last, a deduction from taxable income was allowed for income from overseas technical services.

Additionally, the government created the Japan External Trade Organization (JETRO) to promote Japanese exports. A subsidiary of the Ministry of International Trade and Industry (MITI), JETRO was created in 1958 to provide a variety of overseas market information and offer assistance on the technical details of exporting. Other measures followed, including the establishment of the Export-Import Bank in 1950 to provide low-cost loans for financing trade, the antitrust exemption for export associations under the Medium and Small Company Law, and the preferential treatment of export credit bills at the discount window of the Bank of Japan (where, in the 1960s, the discount rate on such bills was a bit lower than for other bills).

This plethora of measures reflects the strong recognition by the government of the need to overcome balance-of-payments problems and promote growth. Japan at that time was growing very rapidly and growth implied necessary increases in raw material imports which could only be obtained by increasing exports. Restricting manufactured imports could not suffice alone because its favorable impact on the balance of payments would have been quickly swamped by the tremendous increase in raw material imports.

Virtually all of these export promotion measures have been abandoned since the 1960s. All of the tax incentives have been gone for a decade, with the exception of the overseas market development tax-free reserve for small companies and the overseas investment loss reserve. The impact of these measures on Japanese exports today is negligible. The preferential discount rates at the Bank of Japan have been eliminated. JETRO's functions now include both exports and imports. The Eximbank loans have also shifted toward a more balanced emphasis on imports as well as exports.

Illustrating these changing functions are the budgets of JETRO and the loan portfolio of the Eximbank. Export promotion activities remained the principle budget line item for JETRO until the late 1960s. Between fiscal 1969 and fiscal 1983, though, this category dropped from 45.5 percent of JETRO's budget to only 8.2 percent, while import-related activities rose from a miniscule 0.5 percent to 16.3 percent. Eximbank loans directed to exports and imports vary considerably, but for fiscal 1978-83, export-related lending was 58.6 percent of total loans compared to 69.4 percent in the preceding five-year period.

These changes, combined with the dramatic reduction in Japan's import barriers, make it clear that Japan's trade surpluses are not the result of government policies. If anything, policy measures--in the form of voluntary restrictions on certain exports such as automobiles--keep the surpluses smaller and inhibit Japanese economic growth.

The Trade Balance

The answer to questions about Japan's trade surpluses lies in the macroeconomic structure of the Japanese economy, and that structure points to continued surpluses for some time to come. Economists use a simple accounting framework to look at the basic macroeconomic structure of the economy:

$$\text{GNP} = C + I + G + (X-M) = C + S + T$$

This says that the total output of the economy, or gross national product (GNP), can be defined as the different uses to which goods are put -- consumption (C), investment (I), government (G), or net exports of goods and services (exports minus imports or X-M). GNP can also be described by the use to which the income streams generated by economic activity are put -- consumption (C), savings (S) and taxes (T). Simple algebraic rearrangement of these items yields the following result:

$$(S-I) = (G-T) + (X-M)$$

What this equation says is that any imbalance between the domestic supply of savings and the domestic demand for investment (S-I) must necessarily be offset by government deficit spending (G-T) and/or a current-account surplus (X-M). This is not a theory; this is an identity resulting from the accounting framework for analyzing GNP, meaning that it will always be true.

This accounting framework provides a convenient tool for looking at Japan's macroeconomic situation. Since 1973, Japan's economic growth has slowed to less than half the level prevailing in the 1950s and 1960s. With lower growth, the demand for investment in the domestic economy has fallen. At the same time, domestic savings have not dropped by as much. Business savings have dipped somewhat as recession and lower growth reduced profits, but personal savings remain rather high. From a peak of 24 percent of disposable income, individual savings still hover around 20 percent. The result has been the emergence of a large (S-I) surplus; domestic savings now exceed domestic demand for investment. This imbalance has been on the order of 4 to 5 percent of GNP.

Offsetting this surplus have been both government deficits and current account surpluses. The decade since 1973 has brought the emergence of large government deficits in Japan. These deficits have become larger as a proportion of GNP than is the case in the United States, ranging from 4 to 6 percent, as shown in Table 4. Thus, they absorbed most or all of the surplus of savings -- but not completely, and not in every year -- so that the remainder has appeared as a current-account surplus (Table 4). In years of oil crises, large current-account deficits have appeared due to the large increase in import costs, but once the oil-price changes have worked through the economic system, the surpluses have returned.

Barring further oil-price hikes, these current-account surpluses are likely to continue, as will the savings surplus. Savings will fall only very slowly if at all. Economists conclude that the thrifty habits of the Japanese public are unlikely to show any dramatic decline, although the aging population may bring some decrease in the proportion of income saved in the medium-run.

On the other side, the domestic demand for investment is unlikely to rise since no one predicts that Japan will return to a significantly higher growth rate.

The government deficit will continue to absorb much of this imbalance, but its ability to do so is constrained since the Japanese government remains very concerned about the potential inflationary impact of the deficit. Since fiscal 1980, the overriding concern of the Ministry of Finance has been to reduce the government's dependence on debt to fund its expenditures, resulting in the falling ratios of debt to GNP shown in Table 4. Despite its avowed desire to completely eliminate this dependency, fairly considerable government deficits will continue for the reason that much of the increase in government spending has been through entitlement programs, and as the aging of the Japanese population continues, these entitlements (such as social security and medical care) will relentlessly rise. Tax increases large enough to offset this trend are politically unrealistic, so deficits will continue at some level.

With a continued surplus of savings, and limitations on the government's ability to absorb all of it, a current-account surplus is inevitable for at least several years. Within the balance-of-payments framework, that current-account surplus implies an equal and offsetting net outflow of capital from Japan. Along with its current-account surplus, Japan will run an even larger merchandise trade surplus because of the consistent deficit that it runs on services trade. Eventually the large net outflow of capital from Japan may generate enough investment income (which is registered in the balance of payments as a services transaction) that the overall services deficit will turn to a surplus (as has happened in the United States), but that point is a number of years in the future. Thus, the medium-term perspective suggests continued merchandise trade surpluses. Japan tends to run bilateral merchandise trade deficits with major raw material exporters (especially oil exporters) and surpluses with other countries, especially those that are major manufactured good importers. Hence, Japan's continued overall merchandise trade surplus implies that it will run a trade surplus with the United States.

Implications and Conclusions

The analysis in the preceding section implies what many Americans have not considered: Japan's continued current-account and merchandise trade surplus was reached without reference to trade barriers. The conclusion holds regardless of what happens to these barriers. Pressure on Japan to admit more U.S. merchandise does not alter the pattern of excess savings and limitations on the government deficit. Lower trade barriers may increase American exports to Japan, but because the surpluses will remain, the United States and other countries must be willing to absorb more exports from Japan. Considering that Japan's comparative advantage lies in products such as automobiles, is the United States or Europe willing to fight off the protectionist forces at home so that the necessary increase in Japanese exports can proceed? That is a major question.

A related question is whether Americans who believe that Japan's trade surpluses are the result of trade barriers and/or Japanese export promotion policies will accept the fact that the trade balance is unaffected by lower

import barriers. The image of Japan as unfair has distracted attention from the facts; we must learn to divorce the question of trade barriers from trade balances.

The economically rational decision is to continue to press Japan for import liberalization while at the same time accepting the need for increased Japanese exports by removing or avoiding barriers at home. The world will be better off with Japanese trade surpluses and an outflow of Japanese savings than with artificial constraints that interfere with this efficient allocation of economic resources. This academic ideal is unobtainable politically, but at least movement should be in that direction.

Suggested Sources

Annual Report of the Council of Economic Advisers, February 1983, pp. 52-66.

U.S. General Accounting Office, United States-Japan Trade: Issues and Problems.

Report of the Japan-United States Economic Relations Group, January 1981.

Kazuo Sato, "Japan's Savings and Internal and External Macroeconomic Balance" in Kozo Yamamura, ed., Policy and Trade Issues of the Japanese Economy, (Seattle University of Washington Press, 1982).

Gary Saxonhouse, "Evolving Comparative Advantage and Japan's Imports of Manufactures", in Kozo Yamamura, ed., Policy and Trade Issues.

Masaru Yoshitomi, "An Analysis of Current-Account Surpluses in the Japanese Economy", in Fried, Trezise and Yoshida, eds., The Future Course of U.S.-Japan Economic Relations, (Washington: The Brookings Institution, 1983).

For further information, contact Edward Lincoln.

Table 1: Trade in Japan's Economy

(exports and imports as a percentage of GNP)

<u>Year</u>	<u>Exports/GNP</u>	<u>Imports/GNP</u>
1965	9.3%	9.0%
1970	9.5	9.3
1971	10.4	8.6
1972	9.5	7.8
1973	8.9	9.3
1974	12.0	13.5
1975	11.2	11.6
1976	12.0	11.6
1977	11.7	10.3
1978	10.2	8.2
1979	10.3	11.1
1980	12.5	13.5
1981	13.3	12.5
1982	13.0	12.3

Sources: Japan Tariff Association, Summary Report: Trade of Japan; Bank of Japan, Economic Statistics Annual.

Table 2: International Trade in the U.S. Economy

(f.a.s. exports and Customs value imports as a percentage of GNP)

<u>Year</u>	<u>Exports/GNP</u>	<u>Imports/GNP</u>
1965	4.0%	3.1%
1970	4.4	4.0
1971	4.1	4.2
1972	4.2	4.7
1973	5.4	5.2
1974	6.9	7.0
1975	6.9	6.3
1976	6.7	7.0
1977	6.3	7.7
1978	6.6	7.9
1979	7.5	8.5
1980	8.4	9.3
1981	7.9	8.9
1982	6.9	7.9

Source: U.S. Department of Commerce, Statistical Abstract of the United States and Survey of Current Business.

Table 3: An International Comparison of Trade in GNP, 1982
(f.o.b. exports and c.i.f. imports as a percentage of GNP)

<u>Country</u>	<u>Exports/GNP</u>	<u>Imports/GNP</u>
France	17.6%	20.5%
West Germany	26.8	23.6
United Kingdom	20.5	21.0
Italy	21.3	24.9
Canada	24.6	20.2
Australia	14.2	17.2
United States	6.9	8.3
Japan	13.0	12.3

Note: In this table, the import data for the United States is c.i.f., not Customs value as used in Table 2.

Source: International Monetary Fund, International Financial Statistics.

Table 4: Government Deficits and the Current-Account Surplus in Japan
(expressed as a percent of GNP)

<u>Year</u>	<u>Government Deficit</u>	<u>Current Account Surplus/Deficit</u>
1973	1.5%	1.6%
1974	1.6	-0.0
1975	3.5	-0.9
1976	4.2	-0.1
1977	5.1	0.5
1978	5.2	1.1
1979	6.1	-0.8
1980	5.9	-0.1
1981	5.1	0.4
1982	4.3	0.7

Source: Bank of Japan, Economic Statistics Annual.